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Social climate as a mediator between leadership behavior and employee well-being in a cross-cultural perspective

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Abstract

**Purpose** – The purpose of this paper is to examine the direct effects of empowering and employee-centered leadership on well-being, and the indirect or mediating role of social organizational climate between leadership behavior and well-being in a cross-cultural perspective.

**Design/methodology/approach** – Questionnaires were distributed in two furniture retail stores in Sweden and two stores in China belonging to the same company. The final sample consisted of 483 participants from the Chinese and 254 participants from the Swedish stores.

**Findings** – The results of the structural equation modeling showed that there was no direct effect between leadership behavior (employee-centered leadership and empowering leadership) and well-being in either the Swedish or the Chinese sample. Further, the findings of the study indicate that social climate mediates the relationship between leadership behavior and employee well-being, but this seems to be culturally contingent. The mediating effect is prevalent in a culture that has been considered as having a collective orientation and where the power distance is high.

**Research limitations/applications** – Despite some methodological limitations such as the cross-sectional design and problems with acquiescence in responses, the results indicate the complexity of the role of culture in organizational behavior.

**Practical implications** – Managers working in increasingly globalized contexts need to take into consideration that some organizational behaviors gradually become more universal, whereas others remain culturally contingent.
Originality/value – The paper illustrates the complex relationship between leadership behavior, social climate and employee well-being in the same corporate culture, but in different cultural settings.

Keywords Leadership behavior, social climate, well-being, cross-cultural

Paper type Research paper
Introduction

Cross-cultural organizational and leadership research
Increasing globalization has initiated a need for cross-cultural organizational and managerial studies. There is a growing interest among both practicing managers and organizational researchers to understand how organizational variables and leader behaviors are related to employee well-being in different cultural contexts (Lok & Crawford, 2004). Contrasting views can be discerned concerning whether and how the national culture influences leadership style and co-worker expectations about leadership, and even the existence of universally effective leadership is debated (Arvonen & Ekvall, 1999). Some researchers state that there is a universal leadership style that is efficient irrespective of the situation (Arvonen & Ekvall, 1999), whereas others maintain that effective leadership is culturally contingent (Hofstede, 2001; 1980). Furthermore, the term universal can contain a wide variation of meanings (cf. Dickson, Den Hartog, & Mitchelson, 2003, for further discussion). According to a review article by Dickson et al. (2003) there is a decline in the search for simple universality, i.e. that the phenomenon is invariable all over the world, in favor of a more culturally contingent view.

Hofstede’s studies (2001; 1980) are probably the most frequently cited works in the area. He has defined culture as “the collective mental programming of the mind that distinguishes the members of one group or category of people from another” (Hofstede, 2001). Hofstede’s work has been criticized (Ailon, 2008; Moulettes, 2009) for being static, ethnocentric and prejudiced toward non-Western cultures. In spite of the sizeable criticism Hofstede’s studies have had a considerable influence on organizational and leadership research (Dickson et al., 2003). He has distinguished five cultural dimensions, namely Power Distance, Individualism–Collectivism, Masculinity–Femininity, Uncertainty Avoidance and Long-term–Short-term orientation, which can have an effect on leadership style and organizational practices. Of these five dimensions the focus in the current study is on power distance and individualism. Power distance indicates the extent to which the less powerful members of organizations and institutions accept and expect that power is distributed unequally. Individualism versus collectivism refers to the degree to which individuals are integrated into groups (Hofstede, 2001). According to Hofstede (2001), power distance is lower in Sweden than China, whereas individualism is higher in Sweden than in China.

Besides Hofstede’s work cross-cultural issues concerning leadership and organization have been studied by Schwartz (1999) and more recently in the GLOBE project (House, Hanges, Javidan, Dorfman, & Gupta, 2004) that involved 62 countries. These studies differ somewhat in the cultural dimensions they employ but they all show that there are great differences in national culture and cultural values between China and Sweden (Hofstede, 2001; House et al., 2004; Schwartz, 1999). It is therefore important to take culture into consideration when conducting leadership and organizational studies. Thus, in the current study we compare the two countries.

Aim of this study
There is a need for research concerning the associations between leadership behavior, organizational climate and well-being among employees from a cross-cultural perspective. Based on earlier research, it may be assumed that leadership behavior can have a direct effect on employee well-being and an indirect effect, e.g. through organizational climate (Tafvelin, Armelius & Westerberg, 2011). The aim of the current study was to examine (1) the direct effects of empowering and employee-centered leadership on well-being and (2) the indirect or
mediating role of social organizational climate between leadership behavior and well-being in a cross-cultural perspective.

**Leadership behavior in different cultural contexts**
How successful leaders’ behavior differs from that of unsuccessful leaders is a question that has engaged many researchers over the years. Among the early work concerning leadership behavior or leadership style were the Michigan and Ohio leadership studies in the 1950s and 1960s. Both research groups distinguished two leadership styles: the Michigan researchers called them production-centered and employee-centered, whereas the Ohio researchers labeled the styles as initiating structure and consideration (Yukl, 2006). These two styles were originally considered as separate and independent dimensions, whereas later research has presumed that leaders can possess these styles simultaneously, but to a varying degree (Ekvall & Arvonen, 1991; Yukl, 2006).

Dickson et al. (2003) conclude in their review that power distance in society influences leadership practices and perceptions. In countries where power distance is considered to be low (e.g. Sweden) people are inclined to have a preference for more egalitarian leadership, whereas leaders are more likely to be authoritarian and directive in countries with high power distance (e.g. China). Dorfman et al. (1997) found in their study that, while directive leadership seemed to be a culturally specific leadership style, the supportive, employee-centered leadership style appeared to be more universal.

**Leadership behavior and well-being**
There has been increasing research interest in employee well-being in Western societies, but also in the Chinese context (Liu, Siu & Shi, 2010). Even though the research concerning leadership behavior is wide-ranging, the association between leadership behavior and employee well-being has not yet been studied extensively and even less so in cross-cultural research (Nyberg, Bernin & Theorell, 2005).

**Employee-centered leadership and well-being**
There are some findings showing that employee-centered or relations-centered leadership is related to fewer health complaints (Boumans & Landeweerd, 1993). According to a recent review (Skakon, Nielsen, Borg & Guzman, 2010), positive leader behaviors, i.e. supporting and consideration, were related to higher employee well-being. Similar findings have recently been reported in Chinese studies (Liu et al., 2010). We postulate therefore that there will be no cultural differences concerning the relationship between employee-centered leadership and well-being. Employee-centered leadership in this study refers to leadership behaviors that are concerned with the relational aspects toward employees. Based on research results above, we expect a positive relationship between this leadership behavior and employee well-being in both the Swedish and the Chinese samples. We therefore hypothesize:

*H1a: Employee-centered leadership is positively correlated with well-being in Sweden.*

*H1b: Employee-centered leadership is positively correlated with well-being in China*

**Empowering leadership and well-being**
Current work life is characterized by rapid and continuous changes (Burke & Cooper, 2000) that have resulted in structural changes in organizations (Arnold, Arad, Rhoades & Drasgow, 2000).
Traditional hierarchical organizations are being replaced by flat organizations where managers are required to lead in an empowering way with the co-workers, so that they in turn can assume more responsibility for their work (Arnold et al., 2000). Earlier research has mainly focused upon lack of empowerment and its negative effects on health and organizational performance, whereas there has been little research concerning positive outcomes of empowerment on employee well-being (Spreitzer, Cooper & Barling, 2008).

In a culture with high power-distance, as in China, employees may not be expected to have a lot of influence in their work (Spreitzer et al., 2008). Seibert, Silver, & Randolph (2004) have also postulated that individuals from a high power-distance culture may react to an empowering climate with feelings of stress and withdrawal rather than with positive feelings. Empowering leadership in the current study refers to leadership behaviors that encourage the employees to participate and speak up. Sweden has been categorized as being a low power-distance society, where empowering is regarded as something that individuals strive for, whereas in China, considered as a society with high power distance, empowering leadership could result in stress and poorer well-being. Due to this cultural difference, we postulate that empowering leadership has different outcomes on employee well-being in Sweden and in China. Thus, we hypothesize:

\[ H2a: \text{Empowering leadership is positively correlated with well-being in Sweden.} \]
\[ H2b: \text{Empowering leadership is negatively correlated with well-being in China.} \]

**Social organizational climate as a mediator between leader behavior and well-being**

According to Kuenzi & Schminke (2009), leader behavior has been found to be related to work or organizational climate. Limited research has been conducted about how organizational climate is related to health and well-being (Dallner et al., 2000), but the findings so far indicate that there is a relationship between organizational climate and employee well-being (Carr, Schmidt, Ford & DeShon, 2003; Parker et al., 2003). The mediating role of organizational climate in relation to other organizational variables has quite recently started to receive attention and is regarded as a promising approach in order understand how organizational activities like leadership behavior can be related to outcomes such as employee well-being (Kuenzi & Schminke, 2009). These studies have been conducted in countries characterized by individualistic cultures (Hofstede, 2001), and it has been argued that the role of organizational climate would have a stronger effect on employee well-being in more collectivistic cultures (Parker et al., 2003). We presume therefore that social climate will act as mediator in the relationship between leadership behavior, here defined as employee-centered and empowering leadership, and well-being in a collective culture, China, but not in an individualistic culture such as Sweden.

Thus, we hypothesize:

\[ H3a: \text{Social climate mediates the relationship between leadership behavior, i.e. employee-centered leadership and empowering leadership, and well-being in China.} \]
\[ H3b: \text{Social climate does not mediate the relationship between leadership behavior, i.e. employee-centered leadership and empowering leadership, and well-being in Sweden.} \]
**Figure 1.** The hypothesized model.

**Method**

**Procedure and participants**
Questionnaires were distributed in two furniture retail stores in Sweden and all employees were requested to participate. The questionnaires were collected during October-November 2009 and altogether 282 participated in the study (45%). Because of the relatively low response rate, the respondents’ background variables were compared with the total number of employees in the two stores. The mean age, the percentage of women and years of employment did not differ from the total population, whereas the number of managers was somewhat higher in the sample than in the total population in the two stores.

The same questionnaire study was also conducted in two Chinese stores belonging to the same company. All employees were requested to participate. The questionnaires were collected during April-May 2010 and altogether 595 participated in the study (93%).

A number of outliers were identified while we screened the data for normality of item distributions\(^1\). These outliers exhibited extreme response bias, i.e. the tendency for some individuals to systematically use the extreme ends of Likert-type multiple response scales (Chronbach, 1946) in that they scored the highest score on each individual item comprising the measures used in this study. Extreme response bias and acquiescence response bias, i.e the tendency to consistently ‘agree’ by scoring in the upper or positive part of a Likert-type multiple response scale, are well known response style biases and a method problem especially important to control for in cross-cultural research (Clarke, 2000; Van Vaerenberg & Thomas, 2012). Although individual factors e.g. personality traits and demographic factors e.g. age and education level can influence response style, country-level factors such as culture also have a strong influence (Van Vaerenberg & Thomas, 2012). The tendency to acquiesce has been found to be especially high in collectivistic cultures (Meisenberg & Williams, 2008). We screened out the extreme scoring responses both from the Chinese and the Swedish sample in order to avoid that the results would be biased by these responses. After removing the extreme scores, the final

\(^1\) To identify participants with extreme response bias, we used the count procedure suggested by Reynolds and Smith, 2010. This procedure entails computing a sum of participants’ responses on each item (both independent and dependent scales), and then screening out participants who have scored the highest score on each individual item. This criterion matched 112 participants in the Chinese sample and 28 participants in the Swedish sample.
sample consisted of 483 participants from the Chinese and 254 participants from the Swedish stores.

There were significant differences in demographics between the participants in the two countries. The participants in the Swedish stores were older (Sweden: M = 33.9, China: M = 32.0, \(p<.01\)), and had university education to a larger extent (Sweden: 37.9%, China: 23.8%, \(p<.001\)) than the participants in the Chinese stores. There were more females (Sweden: 58.5%, China: 43.5%) in the Swedish sample and they had been working longer in the company than the participants in the Chinese sample (Sweden: M = 3.4, China: M = 2.9, \(p<.001\)).

**Measures**  
We used measures that have been developed and validated in a Swedish context, but which have also been translated into English by the original authors (Dallner et al., 2000; Ekvall & Arvonen, 1991; Oxenstierna, Widmark, Finnholm & Elofsson, 2008). To enable the questionnaire study in China, all the scales were translated from English to Chinese by a native Chinese researcher in psychology (co-author, Chen). The Chinese translation was then verified by a person fluent in both Swedish and Chinese. All measures were subjected to a missing value analysis and missing values were imputed with the EM algorithm in PASW Statistics version 18.

**Leadership behavior** was assessed by two scales. Employee-centered leadership was measured by a ten-item scale developed by Ekvall and Arvonen (1991). A sample item is: “My immediate manager relies on his/her subordinates” (\(\alpha=.96\) China; \(\alpha=.95\) Sweden). Participants responded on a five-point scale from 1 (disagree totally) to 5 (agree totally). Empowering leadership was measured by three items from QPSNordic (Dallner et al., 2000), one example item being “My immediate manager encourages me to speak up when I have different opinions.” Participants responded on a five-point scale from 1 (disagree totally) to 5 (agree totally) (\(\alpha=.92\) China; \(\alpha=.90\) Sweden).

**Social organizational climate** was measured by three items from QPSNordic (Dallner et al., 2000). A sample item is: “The climate at my department is encouraging and supportive” (\(\alpha=.67\) China; \(\alpha=.74\) Sweden). Participants responded on a five-point scale from 1 (disagree totally) to 5 (agree totally).

**Psychological well-being** was measured by four items from a Swedish version of the General Health Questionnaire-12 (Sconfienza, 1998), originally developed by Goldberg (1972). These four items are considered to constitute a subscale of GHQ-12 that measures anxiety and depression (Gao et al., 2004). A sample item is: “I have lost much sleep over worry.” The respondents rated the items on a four-point scale from 1 (Disagree very much) to 4 (Agree very much) (\(\alpha=.75\) China; \(\alpha=.67\) Sweden). Responses were coded so that high values indicate low psychological well-being.

**Control variables:** Earlier studies have shown that demographic variables, such as age (Cunningham et al., 2008), gender (Torkelson & Muhonen, 2008), occupational position (Sparks, Faragher & Cooper, 2001) and job tenure (Bernhard-Oettel, Sverke & De Witte, 2005) can be related to employee health and well-being. There are indications that these demographic variables are related to employee well-being in China too (Siu, Spector, Cooper & Lu, 2005), even though cultural differences such as Chinese (Confucian) work values (Ip, 2009) might produce different patterns of relations than in the west (Lok & Crawford, 2004). Considering the potential importance of the demographic variables as antecedents for well-being, we controlled for age (years); gender (1=male, 2=female); position (1=manager, 2=nonmanager); and number
of years in the company (1=Less than one year, 2=1–2 years, 3=3–5 years, 4=6–10 years, 5=More than 10 years).

**Statistical analysis**

Structural equation modeling was performed with AMOS 18. Because we tested our hypothesized model in two culturally different samples, it was important to show measurement equivalence of the constructs across samples. As Riordan and Vandenberg (1994) emphasize, individuals’ interpretation of a construct may differ between two groups because their frame of reference may not be similar. Thus, only if a construct can be shown to be similar across two groups can the groups be compared. A researcher can deploy different strategies to assess measurement equivalence.

Jöreskog (1971) recommends that the researcher should begin with a global test of equality of the model variance-covariance matrixes across the groups. If the null hypothesis is true, i.e. there is no difference between group variance-covariance matrixes, the groups are considered equivalent. This represents an omnibus test of equivalence because systematic variance, as well as nonsystematic variance (i.e. error variance), is assumed to be identical across groups. If on the other hand H0 is rejected, the researcher should identify the source of nonequivalence by testing a set of increasingly restrictive hypotheses about where the source of nonequivalence is located. However, this omnibus test will almost always indicate nonequivalence because even error variance is assumed to be identical across groups (Byrne, 2010). Thus it may be too strict. Instead, Byrne recommends that the researcher should begin by establishing a baseline model that has no restrictions and compare this model to a series of increasingly restrictive models.

**Analysis strategy.** Our strategy for establishing construct measurement equivalence and subsequently testing our hypotheses consisted of several phases, following the strategy outlined by Byrne (2010). In phase I, we specified a four factor measurement model with good model fit in both groups. This measurement model is the baseline to which subsequent models are compared in the assessment of construct measurement equivalence. Because all variables were collected from the same individuals, we tested for common method variance (CMV) using Harman’s one-factor test. This test is not a remedy or statistical control for CMV, but can be seen as an indicator of its severity (Podsakoff, MacKenzie, Lee & Podsakoff, 2003).

In phase II, we tested for measurement equivalence of the latent variables reflecting the constructs in this study. Models with increased restrictiveness were compared to the baseline model to assess at which level the measurement nonequivalence is situated.

In phase III, we constrained the factor loadings to be equal between the samples for those items that had shown equivalence and specified the structural model according to our hypotheses. In this phase we added control variables to the model and tested our hypotheses. Mediation was tested with a bootstrapping method, which directly calculates the standard error of the indirect paths. The significance of the indirect path is then assessed with the critical ratio test (the ratio of the path estimate over its standard error), where a CR > 1.96 denotes a significant path estimate at the 5% alpha level. Bootstrapping has been advocated as the preferred method to Sobel’s product of coefficients test (Sobel, 1982) and the traditional causal steps approach (Baron & Kenny, 1986), since it is superior in power and control of Type I errors (MacKinnon, Lockwood, Hoffman, West & Sheets, 2002; Shrout & Bolger, 2002).

**Phase 1. Establishing a baseline measurement model.** We specified a four factor measurement model where items in each measure loaded on their corresponding latent factor. Factors were allowed to correlate. This model showed good fit in both the Swedish and the
Chinese sample, as can be seen in Table 1. We then conducted Harman’s one factor test for each sample, using a CFA approach. In this approach, we compared two alternative measurement models to our hypothesized four factor model. The first model had three factors, in which one factor was specified for all leadership items. The second model had one single factor to which all items loaded. The rationale underlying the single factor procedure is that if common method variance is responsible for the item variance in the sample, one factor should fit the data well. Results are shown in Table I. The one-factor model did not fit the data well in either sample, and the fit of the three-factor model was significantly worse than the four-factor model. Thus we concluded that common method variance is not likely to be a major problem in this study.

Table I about here

Phase II. Establishing measurement equivalence across samples. In this phase, we pooled the two samples testing our baseline measurement model in both samples at once. The model fit for this pooled sample was good, see model 1 (configural) in Table II. For our first level of measurement equivalence, we constrained all item factor loadings to be equal between the two samples (model 2). Thus this model tested whether the samples showed equal patterns of factor loadings. Because the models are nested, we were able to use the difference in chi-square and degrees of freedom to statistically test whether the models are different. Comparing model 2 to model 1, the chi-square difference test showed that the two models were significantly different ($p < 0.029$). To find which items contributed to the nonequivalence, we systematically tested each construct by only constraining the items for the latent variable pertaining to the construct. The constructs empowering leadership, social climate and well-being showed full equivalence of factor loadings, while the construct employee-centered leadership was not. It was necessary to free one item in this construct to show partial equivalence (“My immediate manager shows regard for the subordinates as individuals”). Model 2b in table 2 shows the measurement model where all items except this item are constrained to be equal between samples. Comparing model 2b to model 1, the chi-square difference test showed that the models were not significantly different ($p < 0.076$). Last, we constrained all item error variances to be equal between the two samples (model 3). Because we established partial equivalence of the factor loadings in model 2b, model 3 was compared to model 2b. Model 3 was not equivalent between the two samples ($p < 0.001$).

Table II about here

Phase III. Specifying the structural model. In this phase we constrained the factor loadings according to model 2b, and specified the structural paths according to the study hypotheses (Figure 1). All factor loadings were constrained equal between the two samples, except one item in the employee-centered leadership construct. The model fit indices indicated good fit to the data ($\chi^2[343, n = 730] = 851.82, p < 0.001, \chi^2/df = 2.48; \text{RMSEA} = .045; \text{CFI} = .955$). The factor loadings ranged from .43 to .90 in Sweden and from .36 to .91 in China. The lowest factor loadings in both countries (.43 and .36) were related to an item in the latent factor social climate. All other factor loadings were above .53 in both countries. As a last step we entered the control variables (paths are specified in Figure 2) and proceeded to test the study hypotheses.
Results

The descriptive statistics and correlation matrices for the Chinese and Swedish samples are presented in Table III. As can be seen in the table, both employee-centered and empowering leadership had significant correlations with social climate and employee well-being.

Table III about here

The results of the structural equation modeling can be seen in Figure 2. The model accounted for 27% and 18% of the variance (i.e. $R^2$) in well-being in the Swedish and Chinese samples, respectively.

Figure 2a.
Results for the hypothesized paths between employee-centered leadership, encouraging leadership, and employee well-being, mediated by social climate.

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*a* Two sets of parameter estimates are presented. The first set is the Swedish sample ($n = 252$). The second set is in parentheses and this is the Chinese sample ($n = 478$). Standardized beta coefficients are presented for the structural paths. Covariances are indicated with curves. The control variables were specified to covary with all exogenous variables; these paths are omitted in this figure. $R^2$ is presented for the endogenous variables. Items and their corresponding latent variable loadings are omitted for clarity.

* Significant at the 0.05 level (two-tailed).

** Significant at the 0.01 level (two-tailed).
The results showed that there was no direct effect between employee-centered leadership and well-being in either the Swedish or the Chinese sample. Hence, the results did not support our hypotheses (H1a; H1b) as we had expected employee-centered leadership to be positively related to well-being both in Sweden (H1a) and in China (H1b). When it comes to empowering leadership, it was not related to employee well-being in either sample, and thus hypotheses (H2a; H2b) were rejected since we had postulated empowering leadership to be positively related to well-being in Sweden (H2a) but negatively related to well-being in China (H2b).

**Mediation analyses.** The indirect effect of employee-centered leadership on well-being, mediated by social climate, was significant in the Chinese sample with both estimation methods, i.e. the critical ratio test with bootstrapped standard errors ($b = -.134$, SE = .062, CR = 2.16) and the bias-corrected 95 percent confidence interval method (LO 95 = -.249, HI 95 = -.047). The effect was not significant in the Swedish sample with either method. The indirect effect of empowering leadership on well-being was significant in the Chinese sample ($b = -.181$, SE = .073, CR = 2.48, LO 95 = -.271, HI 95 = -.040). In the Swedish sample, the confidence ratio was lower than 1.96 ($b = -.181$, SE = .126, CR = 1.44), indicating non-significance, but the bias-corrected 95 percent confidence intervals did not include zero (LO 95 = -.005, HI 95 = -.245), signifying the opposite. We chose to interpret these results conservatively, as the lower bound was close to zero. Thus the effect was not significant in the Swedish sample. These results supported our hypotheses (H3a, H3b) since we had assumed that social climate would mediate the relationship between leadership behavior and well-being in the Chinese sample (H3a) but not in the Swedish sample (H3b).

The analyses further showed that none of the covariates was significantly related to either social climate or well-being in the Swedish sample. In the Chinese sample position had significant relationships with both social climate ($b = -.12$, $p < .01$) and well-being ($b = -.20$, $p < .01$), indicating that managers found the social climate less positive than did the non-managers, whereas the managers rated their well-being higher than the non-managers. Job tenure was also related to well-being ($b = .17$, $p < .01$) in the Chinese sample, implying that the participants with longer tenure had lower well-being.

**Discussion**

As globalization has increased in recent years, a need for cross-cultural organizational studies has evolved among organizational practitioners and researchers alike. There are differing views concerning the extent to which effects of certain leadership behaviors are universal (Ekvall & Arvonen, 1991; Hofstede, 2001), but according to Dickson et al. (2003) there seems to be more support for the culturally contingent view, i.e. that the leadership behavior and its outcomes vary in different cultures over the world. Earlier research has indicated that leadership behavior can have a direct effect on employee well-being and an indirect effect, e.g. through organizational climate (Tafvelin et al., 2011), but these associations need to be further studied from a cross-cultural perspective. The purpose of the current study was to examine both the direct effects of leadership behavior, here defined as empowering and employee-centered leadership, on well-being, and also the mediating role of social organizational climate between leadership behavior and well-being in a cross-cultural perspective.

The results showed no direct effects between the two leadership behaviors and employee well-being in either the Swedish or the Chinese sample. This leads to the rejection of our
hypotheses (H1a, H1b) that employee-centered leadership could be positively related to well-being both in Sweden and in China. These findings were unexpected and contrary to findings in earlier studies (Liu et al., 2010; Skakon et al., 2010).

Likewise, the hypotheses stating that empowering leadership would be positively related to well-being in Sweden (H2a), but negatively related to well-being in China (H2b), were rejected. We had assumed, based on earlier cultural studies (Hofstede, 2001; 1980) that in a high power-distance culture like China the empowering could be related to poorer well-being, whereas in a low power-distance country such as Sweden empowering would be positively related to well-being.

Finally, the hypotheses that social climate would mediate the relationship between leadership behavior, i.e. employee-centered leadership and empowering leadership, and well-being in China (H3a), but not in Sweden (H3b), were supported. The reasoning behind these hypotheses were also based on earlier findings (Hofstede, 2001; 1980) since we assumed that social climate would have a more central role in China, as it is considered a more collectivistic culture, whereas this would not be the case in Sweden, an individualistic culture.

Taken together, the results of the study indicate that there are both similarities and some differences between the two countries. The similarities between the countries could be due to the fact that the stores share a same organizational culture with specific values and expectations. Similarly, it could be the strong shared organizational culture rather than leadership behavior per se that influences employee well-being.

At the same time, one of the strengths of the study is that the furniture retail stores where the questionnaire studies were conducted belonged to the same company, sharing the same type of organizational culture values. The stores were organized in the same way with tasks and positions being equivalent in the two countries. This reduces the risk that differences between the two countries were due to organizational rather than cultural factors.

There are several limitations in this study that should be taken into consideration. First, due to the cross-sectional design of the study we cannot make causal claims about the directions of the relationships discovered. Second, we had to remove a large number of extreme scoring participants, which could indicate problems with our data. We do not know whether the remaining data still has individuals with acquiescent response styles. This is however a common problem with all cross-cultural research (Van Vaerenbergh & Thomas, 2012). Third, the measures in this study were collected from the same source. We used Harman’s one factor test and concluded that common method variance was likely to not be a significant problem. However, the test has been criticized for its low detection rate (e.g. Podsakoff et al., 2003) and the question remains whether some variation in the relationships could be attributed to common method variance.

In sum, the findings of the study indicate that social climate mediates the relationship between leadership behavior and employee well-being, but that this seems to be culturally contingent, since this mediating effect could be found in a culture with a collective rather than individualistic orientation, and where the power distance is considered high (Hofstede, 2001). As culture can viewed as something changeable rather than static (Ailon, 2008; Moulettes, 2009), and considering the rapid and revolutionary change in China, there is need for future cross-cultural studies in order to elucidate the relationship between different organizational factors.

References


Table I.
Model fit for the hypothesized four-factor model, and for two alternative models.

<table>
<thead>
<tr>
<th>Model</th>
<th>Model fit</th>
<th>Model comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\chi^2$</td>
<td>df</td>
</tr>
<tr>
<td>4-factor (hypothesized)</td>
<td>314.5**a</td>
<td>164</td>
</tr>
<tr>
<td></td>
<td>(515.9**b)</td>
<td>(164)</td>
</tr>
<tr>
<td>3-factor (one factor for leadership)</td>
<td>402.41**</td>
<td>167</td>
</tr>
<tr>
<td></td>
<td>(780.7**)</td>
<td>(167)</td>
</tr>
<tr>
<td>1-factor</td>
<td>611.57**</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td>(1293.8**)</td>
<td>(170)</td>
</tr>
</tbody>
</table>

a Swedish sample is denoted without parentheses. $n = 254$.
b Chinese sample is denoted with parentheses. $n = 483$.
** $p < 0.001$
### Table II.
Comparison between models for testing factorial equivalence

<table>
<thead>
<tr>
<th>Model</th>
<th>No.</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>CFI</th>
<th>RMSEA</th>
<th>Comparison</th>
<th>$\Delta \chi^2$</th>
<th>$\Delta df$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configural (baseline)</td>
<td>1</td>
<td>830.38**</td>
<td>328</td>
<td>2.53</td>
<td>.956</td>
<td>.046</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Factor loadings constrained</td>
<td>2</td>
<td>858.64**</td>
<td>344</td>
<td>2.50</td>
<td>.954</td>
<td>.045</td>
<td>2 vs. 1</td>
<td>28.26</td>
<td>16</td>
<td>&lt; .029</td>
</tr>
<tr>
<td>Factor loadings constrained, 1 item free</td>
<td>2b</td>
<td>853.80**</td>
<td>343</td>
<td>2.49</td>
<td>.955</td>
<td>.045</td>
<td>2b vs. 1</td>
<td>23.42</td>
<td>15</td>
<td>&lt; .076</td>
</tr>
<tr>
<td>Residuals constrained</td>
<td>3</td>
<td>1079.16</td>
<td>363</td>
<td>2.97</td>
<td>.937</td>
<td>.052</td>
<td>3 vs. 2b</td>
<td>225.35</td>
<td>20</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>

---

** Note: $n = 737$

** Note: $** p < 0.001
Table III.

Means, standard deviations, and inter-correlations between the study variablesabc.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employee well-being</td>
<td>3.75</td>
<td>.70</td>
<td>–</td>
<td>–.36**</td>
<td>–.28**</td>
<td>–.21**</td>
<td>–.02</td>
<td>–.02</td>
<td>–.11*</td>
<td>.15**</td>
</tr>
<tr>
<td>2. Social climate</td>
<td>3.87</td>
<td>.83</td>
<td>.38**</td>
<td>–</td>
<td>.68**</td>
<td>.65**</td>
<td>.01</td>
<td>.03</td>
<td>–.11*</td>
<td>–.12**</td>
</tr>
<tr>
<td>3. Employee-centered leadership</td>
<td>3.91</td>
<td>4.07</td>
<td>.41**</td>
<td>.55**</td>
<td>–</td>
<td>.82**</td>
<td>–.03</td>
<td>.01</td>
<td>–.01</td>
<td>–.11*</td>
</tr>
<tr>
<td>4. Empowering leadership</td>
<td>3.91</td>
<td>3.93</td>
<td>.48**</td>
<td>.56**</td>
<td>.83**</td>
<td>–</td>
<td>–.02</td>
<td>–.05</td>
<td>–.02</td>
<td>–.10*</td>
</tr>
<tr>
<td>5. Age (years)</td>
<td>33.8</td>
<td>32.1</td>
<td>–.06</td>
<td>–.09</td>
<td>–.14*</td>
<td>–.15*</td>
<td>–</td>
<td>–.09*</td>
<td>–.10*</td>
<td>.46**</td>
</tr>
<tr>
<td>6. Genderd</td>
<td>–</td>
<td>–</td>
<td>.09</td>
<td>.19**</td>
<td>.16**</td>
<td>.11</td>
<td>–.04</td>
<td>–</td>
<td>–.02</td>
<td>–.07</td>
</tr>
<tr>
<td>7. Positione</td>
<td>–</td>
<td>–</td>
<td>–.24**</td>
<td>–.07</td>
<td>–.01</td>
<td>–.08</td>
<td>–.05</td>
<td>–.04</td>
<td>–</td>
<td>–.07</td>
</tr>
<tr>
<td>8. Job tenuref</td>
<td>3.44</td>
<td>2.94</td>
<td>–.06</td>
<td>–.07</td>
<td>.13*</td>
<td>–.11</td>
<td>.63**</td>
<td>–.07</td>
<td>.03</td>
<td>–</td>
</tr>
</tbody>
</table>

a Means and standard deviations for the Swedish sample are given without parentheses and for the Chinese sample with parentheses.

b The Swedish sample correlation matrix is given below the diagonal and Chinese sample correlation matrix above the diagonal.

c Swedish sample: n = 254, for variable 6 and 7, n = 253. Chinese sample: n = 483, for variable 6, n = 481.

d Gender was coded as follows: 1 = “male”, 2 = “female.”

e Position was coded as follows: 1 = “manager”, 2 = “nonmanager.”

f Job tenure, i.e. number of years in the organization, was coded as follows: 1 = “less than one year”; 2 = “1–2 years”; 3 = “3–5 years”; 4 = “6–10 years”; 5 = “more than 10 years.”

*. Correlation is significant at the 0.05 level (two-tailed).

**. Correlation is significant at the 0.01 level (two-tailed).